

PRINCE WILLIAM SOUND/COPPER RIVER AREA
TRANSPORTATION PLAN

TRANSPORTATION NEEDS
AND DEFICIENCIES
TECHNICAL MEMORANDUM

prepared for the
Alaska Department of Transportation and Public Facilities

prepared by
Parsons Brinckerhoff
in association with
HDR Alaska, Inc.
Northern Economics
The Glosten Associates, Inc.
Ogden Beeman & Associates, Inc.

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INTRODUCTION

The Alaska Department of Transportation & Public Facilities (DOT&PF) is leading the development of a long-range, multimodal regional transportation plan for the Prince William Sound/Copper River (PWS/CR) Area. The 20-year plan will recommend improvements to surface, air, and marine transportation to enhance the movement of people, vehicles, and freight within the region as well trips to and from the region.

This technical memorandum describes the transportation needs and deficiencies of the PWS/CR area. These needs and deficiencies form the backbone of the alternatives that have been developed in this regional planning effort. Described herein are existing and anticipated needs and deficiencies for each of the major transportation modes (marine, air and roadway). Insofar as this is a regional plan, as opposed to a compilation of individual community plans, opportunities to connect the region's communities, to connect these communities with the outside world, and to improve connections between modes are emphasized.

Although the goals and objectives established earlier in this planning effort (*Prince William Sound/Copper River Area Transportation Plan Goals and Objectives Technical Memorandum*, July 1998) were most central in identifying transportation needs and deficiencies, several other sources are referenced:

- *Transportation Needs and Priorities in Alaska*, August 1999;
- *Cordova, Chenega Bay, and Tatitlek Travel Survey*, October 1998;
- Various planning-related documents and studies.¹

Described in the next section are regional goals and objectives, as well as findings from the other referenced documents.

¹ Among the documents reviewed were the following: *Alaska Aviation System Plan Update*, March 1996; *Alaska Harbor and Boating Facilities Directory*, April 1995; *Shore Facilities Condition Survey Report*, 1992; *Regional Airports Plan*, August 1999; *Rural Alaska Community Visitor Profiles*, June 1997; *Preliminary Transportation Alternatives Technical Memorandum*, February 1999; and *1998-2000 Statewide Transportation Improvement Program*, January 1999.

PRINCE WILLIAM SOUND/COPPER RIVER AREA TRANSPORTATION GOALS AND OBJECTIVES

The transportation goals and objectives for the Prince William Sound/Copper River area emphasize more convenient, efficient and safe transportation based on reliable revenue sources. Improving connections between communities, as well as connections between modes, is also key. The established goals for the PWS/CR area are presented below. Meanwhile, the specific objectives associated with each goal are contained in Appendix A.

PWS/CR Area Transportation Plan Goals and Objectives

- Goal 1: Improve transportation convenience;
- Goal 2: Enhance transportation system efficiency;
- Goal 3: Secure stable long-term transportation funding;
- Goal 4: Improve transportation safety and reliability;
- Goal 5: Enhance system adaptability and flexibility;
- Goal 6: Assure the preservation of the needed transportation system;
- Goal 7: Develop and protect economic and subsistence resources;
- Goal 8: Provide early, meaningful and continuous public involvement.

PRINCE WILLIAM SOUND/COPPER RIVER AREA CHARACTERISTICS

As part of the development of the goals and objectives of the Prince William Sound/Copper River region, the region's strengths and weaknesses – along with its constraints and opportunities – were examined. In terms of prospects for achieving a safe, efficient transportation system, the region has some significant advantages, including a number of good road connections. (Specifically, the region will soon benefit from the opening of the Whittier Tunnel which will for the first time allow cars and trucks to drive directly from the state's roadway network into western Prince William Sound.) Another regional strength is that its economic base is not dependent on a single natural resource, which cushions the region from the devastating effects of sporadic poor harvests or price drops. In addition, the region has experienced an influx of capital for infrastructure improvements not only from the state, but also from private developers. The region's natural beauty and recreational opportunities attract tourists from around the world.

On the other hand, the PWS/CR area faces a number of transportation challenges. Marine service is relatively infrequent and inconvenient, fostering dependence on air travel, which is an expensive means of conveying passengers and freight. Although air travel is in many cases the most feasible mode choice, some communities do not enjoy regularly scheduled air service. Severe weather and highly variable seasonal demand hinder year-round operation of all the transportation modes. In addition, few communities enjoy direct access to one another. Summarized in Table 1 are the PWS/CR area's strengths and weakness as identified by the Advisory Committee. Summarized in Table 2 are the region's opportunities and constraints.

Table 1
Strengths of Weaknesses of the PWS/CR Area

Strengths	Weaknesses
<ul style="list-style-type: none"> • Road connections • Wildlife and scenery • Wilderness • Sportfishing • Commercial fishing • Cultural and historic resources • State and federal parks • Traditional marine access • Established commercial ports • Mining potential • Unique regional character • Diverse employment opportunities • Forest resources 	<ul style="list-style-type: none"> • Flow imbalances (people and freight) • High costs of goods and transportation • Seasonal demand • Severe weather • Infrequent service (varies by community) • Dependence on air travel in certain communities • Lack of direct connections between communities • Tourism not generating local revenue • Cost of electricity • Lack of economic diversification (varies by community) • Lack of regional government • Lack of areawide planning • Lack of fire and emergency medical services (varies by community)

Table 2
Opportunities and Constraints Faced by the PWS/CR Area

Opportunities	Constraints
<ul style="list-style-type: none"> • SeaLife Center • Backhaul capacity for freight • Travel demand from outside travelers • Marine fuel tax dedication • Tourism • Ecotourism • DOT&PF capital investments in transportation infrastructure • Large capital investment from outside developers • Anchorage-based fish processing • Subsistence • Environmental group interest in Prince William Sound resource management • Possible gas pipeline • Whittier tunnel • Exxon Valdez Oil Spill dollars • Native corporation land ownership 	<ul style="list-style-type: none"> • External hub for travel (Anchorage) • Majority state and federal land ownership • Power cost equalization • Lack of local tax base • State budget cuts • Out-of-state labor and employers • Environmental group interest in Prince William Sound resource management • Vertical integration of tourism facilities • Old marine facilities • Lack of regional government • Resource conflicts due to Whittier tunnel • Threat of future oil spills • Threat of loss of biological sustainability

TRAVEL SURVEY RESULTS

As part of this transportation planning effort, a survey was conducted in Chenega Bay, Cordova, and Tatitlek (communities not accessible by road) to assess residents' attitudes toward current ferry service and to define their preferences for improved ferry service. In general, the survey reiterated the goals and objectives of the region as well as the constraints and weaknesses of the regional transportation system. The survey revealed a preference for convenient ferry service with more sailings. Respondents traveled most often by air, but indicated they would be willing to use ferry service if it was more frequent particularly to destinations such as Whittier and Seward where travelers would have access to Anchorage via ground transportation.

NEEDS AND DEFICIENCIES

In general, there is no single “glaring” missing link in the transportation system of the PWS/CR area. All of the coastal communities (Chenega, Cordova, Seward, Tatitlek, Valdez, and Whittier) have AMHS landings; fish and recreational boat moorage; and docks classified as community service facilities. Community service facilities are those marine facilities that can accommodate the movement of supplies and people. Although each of these communities can support marine transportation, upgrades and improvements are needed at each of the facilities. For example, both Cordova and Valdez have identified needed improvements to their barge landing facilities. Furthermore, the overwhelming message from the travel survey was for more convenient and frequent ferry service. The AMHS system has a number of needs that are both systemwide and specific to terminals in the study area, but only the needs specific to the communities of the PWS/CR area are described in this memorandum.

Each community in the study area has an air facility, but some communities, such as Cordova, are more dependent than others on it. Communities such as Seward, which have road and rail connections to Anchorage, are less dependent on air travel to move people and goods. Whittier does not receive any scheduled air service, and consequently has almost non-existent air passenger volumes. Chitina and Whittier, along with Tatitlek and Chenega, are the recipients of very little air freight.

As far as the need for surface transportation in the region, an obvious need (in terms of improving the region’s access and mobility) is for improved links between the communities of the region as well in and out of the region. However, the region’s needs can not just be fulfilled by improving just one mode, but can be best met by transportation solutions which provide inter-modal connections. For instance, improving marine highway service to Cordova would provide improved access to Anchorage and beyond via the opening of the Whittier Tunnel.

Beyond the goals, objective, strengths, weaknesses, constraints and opportunities as identified for the PWS/CR Area Transportation Plan, another key source in defining the region’s needs and deficiencies was the DOT&PF’s publication, *2001–2003 Needs List for Alaska*. This list constitutes an ongoing inventory of needed transportation projects which are formally submitted to the DOT&PF by residents, elected officials and transportation professionals. Because the *Needs List* includes all formally proposed projects, not all projects neatly fit the goals and objectives established for this planning effort. The next section identifies the needs and deficiencies by subarea that are “regional” in nature and meet the goals and objectives of the region (with the list found in Appendix B). General needs and deficiencies of the region as found in other planning related documents are also included which meet the regional goals and objectives. Projects already programmed as part of the *1998–2000 STIP* are listed in Appendix C.

SEWARD

Air

Seward is not overly dependent on air transportation given its good rail and road connections. However, some aviation improvements are needed. Seward has some basic approach capabilities with runway edge lights, but would like to replace the existing lighting system at the airport. In addition, Seward needs to update and revise its Airport Master Plan.

Marine

The port connects to Seward the Alaska interior by rail, road, and air. Its diversified marine facilities include a coal terminal; commercial fishing docks and processing facilities; a boat harbor; ferry terminal; and cargo facilities. A number of needs have been identified for the marine facilities at Seward. These include capital improvements to the AMHS intermodal freight and passenger facilities, an extension of the North Dock at the Seward Marine Industrial Complex, and expansion of the small boat harbor. Seward is slated to receive just over \$3.3 million dollars in 1999 for the Seward Harbor from the Legislature to identify and fund needed maintenance, repairs, and replacements.

Highway

Within the study area, Seward Highway has two paved lanes with full shoulders, and passing lanes are provided along several steep sections. The Seward Highway is a National Highway System route and has been designated as a National Scenic Byway. As a main transportation connection between Anchorage and Seward, the Seward Highway generates considerable demand. The highway also has intermodal connections with the Alaska Railroad, the ports of Seward, Anchorage, and Whittier (via the Whittier Road), the Anchorage International Airport (via Minnesota Drive and International Airport Road), and the Sterling and Glenn/Parks Highways. Much of the Seward Highway is being rehabilitated as part of the 1998-2000 STIP, thus little additional need is anticipated within the time frame of this study.

CHENEGA

Air

Chenega receives regular mail service via air. The airport receives some regularly scheduled passenger service, but there is little demand in Chenega. Chenega has indicated a need to upgrade some of its airport facilities, including the installation of heat and electricity in the buildings. In addition, Chenega has requested funding for runway lighting.

Marine

Chenega has two docks: (1) a floating dock that serves as a small boat harbor for both transient and permanent moorage; and (2) a new dock that accommodates large (>40 feet) vessels, including AMHS. Local fishing boats are able to moor at the small boat harbor. No need has been identified for Chenega facilities.

Highway

Chenega has no regional highways.

WHITTIER

Air

Whittier can be reached by charter air, but there is no scheduled air service. Whittier's air facilities need some major improvements insofar as the airport's gravel-surface runway does not meet FAA design standards because it is too short and too narrow. Whittier does not have runway edge lighting, and a project that would add this feature is included as a priority under the *National Plan of Integrated Airport Systems*. Use of Whittier's air facilities is limited, and no winter air service is provided to and from Whittier.

Marine

The Port of Whittier handles a variety of traffic, including two commercial carriers, regular AMHS service, several cruise ships during the summer, and fishing and sightseeing charter boats. A small boat harbor in Whittier shelters up to 338 commercial and pleasure boats under 100 feet long. A harbor expansion project is slated to begin in 1999, which will expand the harbor's moorage capacity by 200 berths. Under the *1998-2000 STIP*, Whittier has programmed funds for the construction of a new terminal building and paved staging area.

Whittier has identified a number of needs for its harbor and marine facilities. The railroad dock at Whittier needs rehabilitation. Whittier hopes to provide a pedestrian overpass from the city center to the harbor and marine facilities to provide a safe crossing over the railroad tracks, and funds for this project have been programmed as part of the *1998-2000 STIP*.

AMHS capacity between Valdez and Whittier, particularly during the summer peak, is considered insufficient, and the opening of the Whittier Tunnel will exacerbate this problem. In addition, there is a demonstrated need based on the recent travel survey for a more convenient ferry schedule.

Highway

DOT&PF is constructing a new 12-mile road to Whittier, which will ultimately connect Whittier with the rest of the road system. The recently constructed 450-foot long tunnel will include two full lanes and full shoulders, plus emergency walkways. A long 2.5-mile, one-way tunnel controlled by an intricate automated gate and traffic system will be built in the vicinity of Bear Valley. Traffic volumes are expected to average 2,000 trips a day when the project is opened, increasing to nearly 2,800 trips per day over the next 15 years. Given this new road connection, Whittier will not need any additional road improvements within the study time period.

VALDEZ

Air

The Valdez airport is classified as a regional airport under the 1996 AASP classification system. It has a paved, 6,500-foot long runway that offers precision approaches to its primary runways and has runway edge lights. However, the approaches are limited by surrounding terrain, which influences the ability to operate in inclement weather conditions, and this results in a high rate of cancelled flights for an airport of this size. The airport, as of August 1999, does not meet the

FAR Part 139 safety standards for commercial service airports, and the estimated cost to meet these standards will be about \$1 million. Under the FAR Part 139 safety standards, airports are required to provide and maintain runway safety areas which are capable of supporting aircraft in the case of undershoot or veering off the runway. The Valdez airport does not meet these standards as its safety area is smaller than the required width (500') and length (1000'). A practicality study and airport master plan update are both expected to begin in fiscal year 2000.

The City of Valdez would like the master plan should look into ways to upgrade the landing system at the airport as well as the possibility of jet service. The airport at Valdez is in need of some general upgrades, including construction of a fence to prevent wildlife encroachment; repavement of the runway, taxiways and apron; and lighting system upgrades. In addition, the City as well as private interests would like to see the runway extended. Lastly, improved seaplane facilities at the Robe Lake Seaplane Base have been identified by DOT&PF as seaplane landings are impractical at the Valdez airport. However, the Robe Lake Seaplane Base is an unmanaged facility and conflicts exist with recreational users.

Marine

Waterfront facilities at the port are divided among the northern and southern shores at Valdez. General cargo, ferry, and small boat facilities are concentrated on the northern shore. The Port of Valdez is the southern terminus of the 800-mile Trans-Alaska oil pipeline. A federally authorized navigation project at Valdez provided for a 12-foot deep small boat basin, approximately ten acres in area, with a 12-foot entrance channel protected by two rockmound breakwaters, 625 and 685 feet long. Upcoming needs in Valdez include improved barge landing facilities, installation of mast lights, and an extension of the harbor float. A project feasibility study with the Army Corps of Engineers is currently underway to analyze a harbor expansion. Several of Valdez's needs have been programmed in the *1998-2000 STIP*, including construction of a new terminal building, a new ferry mooring structure, an improved vehicle staging area, and installation of a new vessel communication system.

AMHS capacity between Valdez and Whittier, particularly at the summer peak, is considered insufficient, and the opening of the Whittier Tunnel will exacerbate this lack of capacity. In addition, there is a demonstrated need based on the recent travel survey for a more convenient ferry schedule.

The recent initiative to establish a port authority for the export of natural gas through a parallel pipeline from Alaska's North Slope as well as Alaska Petroleum Company (ALPETCO)'s plans to construct a fuel pipeline from their refinery on Dayville Road to the Alyeska terminal have the potential to impact marine transportation in and out of the Valdez harbor. If either of these projects are implemented much more marine activity can be expected, thus would put pressure on the Valdez harbor and may translate to additional needs at the harbor.

Highway

The paved, two-lane Richardson Highway connects Valdez with the rest of the road system in Alaska, and volumes along this link are fairly high. The Richardson Highway is part of the National Highway System from Valdez to Fairbanks, and connects to the Glenn Highway and Anchorage. Much of the Richardson Highway is being upgraded and resurfaced as part of the *1998-2000 STIP*, thus little additional need is anticipated. The Dayville Road in Valdez provides transportation access for the Port, and Valdez has indicated a need to rehabilitate and widen this road.

TATITLEK

Air

Tatitlek receives regular mail service. The airport, however does not receive regularly scheduled passenger service, although there is a good deal of demand.

Marine

Two docks are presently operated at Tatitlek. One is an older wooden dock, and studies are underway to enhance this dock. The other dock, which was built in 1995, has a concrete deck, steel box girders for supports and piling, a 600-foot approach, a one-acre staging area, an access road, and a two-stage ramp and dolphin system. The newer dock can only accommodate larger boats (>40 feet) such as ferries, and smaller boats must use the older wooden dock. AMHS service is provided by request at the new concrete dock. Tatitlek would like to construct an inner harbor for 32 vessels following the construction of a breakwater by the Corps of Engineers.

Highway

Tatitlek has no regional highways.

CHITINA

Air

Chitina can be reached by charter air and receives regular mail service by air as well as scheduled passenger service twice daily from McCarthy in the summer. The length of the runway at Chitina is less than 3,000 feet long, which is defined as deficient. The FAA recommends that community airports such as Chitina have runway lengths of at least 3,000 feet by 60 feet. Chitina does not have runway edge lighting, and this project is included as a priority of the *National Plan of Integrated Airport Systems*. Chitina generates very little air travel demand except as a transfer point for summer visitors flying into and out of Wrangell-St. Elias National Park.

Marine

Alaska Department of Fish & Game has submitted a request for a boat ramp to the Copper River in the vicinity of Chitina.

Highway

Chitina is accessible via the Edgerton Highway, which connects to the Richardson Highway about 94 miles northwest of Valdez, linking Chitina to Prince William Sound as well as Alaska's highway network. The Edgerton Highway also links Chitina to McCarthy and Wrangell-St. Elias National Park. The Edgerton Highway will likely need some upgrades within the study time period; none, however, have yet been identified.

CORDOVA

Air

Cordova has the best-developed air travel infrastructure in the study area with a 7,500-foot paved primary runway and a 1,900-foot crosswind gravel runway along with precision approaches to its primary runways. Alaska Airlines stops twice a day at Cordova, and this airport has runway edge lights, approach lights, runway end identifier lights.

The airport has not met the FAR Part 139 safety standards for commercial service airports, and the estimated cost to meet these standards will be about \$1 million. Under FAR Part 139 safety standards, airports are required to provide and maintain runway safety areas which are capable of supporting aircraft in the case of undershoot or veering off the runway. The Cordova airport does not meet these standards as its safety area is smaller than the required width (500') and length (1000') and it is estimated it will cost \$2,000,000 to meet this standard. A new airport master plan is slated to be undertaken in 2000. In addition, the facility at Cordova also needs to be fenced to prevent wildlife encroachment. The airport, also could use some upgrades to its facilities including a new snow removal equipment building.

The DOT&PF also manages as a local airport/seaplane facility at Eyak Lake. Funding has been requested to resurface the runway and taxiways with asphalt, provide an area for helicopter landings, and construct a float system for float planes.

Marine

Cordova's port facilities provide services for fishing, recreational, commercial and AMHS service. The small boat harbor is one of Alaska's largest, with moorage for 864 vessels and a staging area for the AMHS service has been completed.

The residents of Cordova do anticipate a need for frequent, faster, and more convenient ferry service. The residents who responded to the travel survey choose Whittier as their first choice for a port of call (52 percent) followed by 35 percent choosing Valdez. Cordova has quite a few plans for its harbor, including the construction of a new breakwater extension, replacement of the inner harbor boat launch ramp, construction of new deep water dock facility, improved barge landing facility, and an expansion of its small boat harbor.

Highway

An identified need for Cordova is a surface transportation link to Chitina or the Richardson Highway which would provide a connection the rest of Alaska. Plans are in place for the Copper River Trail, a hiking and biking recreational trail, to connect Chitina and Cordova. The Cordova area, also has a highway, the Copper River Highway, which links Cordova with its airport and the community to the Copper River Delta National Wildlife Refuge. The first 13 miles out of Cordova are paved on the Copper River Highway, but from mile 13 to mile 49, the 20- to 22-foot wide road is a gravel surface, and experiences fairly low volumes of traffic.

In order to extend the Copper River Highway to the Richardson Highway or Chitina would require a crushed gravel surface, two ten-foot lanes and four-foot shoulders to meet federal standards, which would be quite expensive. In addition, there is not a clear consensus from the community on whether the Copper River Highway should be improved.

SUMMARY

Each community has transportation needs and deficiencies, which range from very specific needs, such as providing electricity to airport buildings, to large-scale deficiencies, such as the expressed desire for more frequent AMHS service to all the coastal communities. Overall, the Prince William Sound/Copper River area has a need for more convenient transportation between communities and to and from those outside the region. The respondents of the travel survey affirmed this need by asking for more frequent and faster marine service. As for highway travel, extending the Copper River Highway would provide the residents of Cordova with connections to other communities of the region and beyond. However, the cost and environmental implications of this extension would be considerable, and community support is sharply divided on the issue. Residents of PWS/CR have expressed their desire for more community to community scheduled air service, as flying to communities within PWS/CR via Anchorage is inconvenient for most residents. Additionally, improved surface access to Whittier may generate additional market demand for scheduled air service between PWS/CR communities.

Although needs and deficiencies for all of the major modes have been articulated, implementation of marine service improvements is generally more feasible. Building road connections in this region is problematic as the state faces considerable environmental and political constraints. Furthermore, the rugged topography of the region's coastal communities better supports marine or even air travel. The airline industry, however controls much of the level and quality of service of air travel in this region. The market for airline travel is not great in this region given the little demand and high operation costs. The state's main role in air transportation focuses on the provision of airport and air terminals, which includes the construction, maintenance, and operation of the ground facilities.

Taken together, these implementation issues will be important in the development and evaluation of the alternatives for Prince William Sound/Copper River area, and will likely focus consideration on the marine alternatives.

APPENDIX A: GOALS AND OBJECTIVES

DOT&PF MISSION STATEMENT

The mission of the Department of Transportation and Public Facilities is

to improve the quality of life for Alaskans, by cost effectively providing, operating, and maintaining safe, environmentally sound, and reliable transportation systems and public facilities. Special emphasis will be given to utilizing meaningful public participation and creating working partnerships with other entities.

For the purpose of the Prince William Sound/Copper River Area Transportation Plan, the state-wide mission statement is adopted as it stands. Statewide goals and objectives on the other hand, are not specifically reflected in this memorandum because the goals and objectives developed here must be specific to the characteristics of the region to enable achievement of the same stated mission within the Prince William Sound/Copper River area.

GOAL 1: IMPROVE TRANSPORTATION CONVENIENCE

Improve the convenience of the transportation system in the region.

Objectives

1. Improve connections and scheduling between transportation modes to reduce waiting times
2. Implement faster modes of surface transportation to reduce the time required to travel between communities
3. Improve connections between communities when it is warranted by both need and community support
4. Provide mechanisms for the dissemination of current travel information so travelers can plan more convenient trips
5. Involve communities and stakeholders at all stages of schedule development for the AMHS

GOAL 2: ENHANCE TRANSPORTATION SYSTEM EFFICIENCY

Provide regional transportation facilities and services in the most efficient and cost-effective way possible

Objectives

1. Provide missing intermodal links which would enhance the efficiency of the transportation system
2. Minimize transportation system directional flow imbalance by identifying means to exploit backhaul potential
3. Improve connections and scheduling between transportation modes

4. Maximize occupancy/ridership per trip (“utilization factor”) on existing facilities or services
5. Encourage the use of vehicles with flexible passenger/freight interchangeability
6. Implement appropriate instrumentation and technological advancements to enhance system efficiency
7. Provide mechanisms for the dissemination of current travel information so travelers can plan their trips more efficiently
8. Build appropriate institutional relationships involving public and private sector users, providers and regulators of the Prince William Sound/Copper River area intermodal transportation system for ongoing dialogue on the efficiency of the system
9. Explore options to increase competition in the provision of transportation services in the Prince William Sound/Copper River area
10. Utilize equipment designed to serve specific travel markets in the most efficient manner
11. Use “life-cycle” financial analysis to determine the tradeoffs in capital investments to minimize on-going operating and maintenance costs
12. Utilize AMHS vessel data to identify those projects that will provide the maximum reduction to long term maintenance and operational cost
13. Identify existing facilities or services not needed in the future

GOAL 3: SECURE STABLE LONG-TERM TRANSPORTATION FUNDING

Secure stable long-term funding for implementing transportation improvements and providing transportation services.

Objectives

1. Promote reliable revenue mechanisms that provide adequate funding improvements to the existing transportation system
2. Encourage a balancing of the amount of fees or revenue generated by specific facilities/services to the amount expended for the preservation, operation, and maintenance of those same facilities/services
3. Provide transportation services and facilities through local and regional partnerships that do not depend solely upon the allocation of funds through the state legislature
4. Use the Alaska Transportation Infrastructure Bank (ATIB) to provide loans to state and local governments for revenue-generating public highway projects

GOAL 4: IMPROVE TRANSPORTATION SAFETY AND RELIABILITY

Improve the overall safety and reliability of the regional transportation system.

Objectives

1. Implement fully the national Highway Safety Improvement Program (HSIP).
2. Identify solutions to safety problems in aviation, i.e. through improved weather information and navigational aids for aviation
3. Implement appropriate instrumentation and technological advancements to enhance system reliability
4. Improve connections and scheduling between transportation modes to enhance travel reliability
5. Identify solutions to potential marine safety issues

GOAL 5: ENHANCE SYSTEM ADAPTABILITY AND FLEXIBILITY

Develop and maintain a regional transportation system that can effectively adapt to changing physical, economic and demographic conditions with minimum “throw away” costs

Objectives

1. Prioritize transportation improvements based on long-term needs
2. Provide opportunities for making intermodal connections
3. Review and update master plans for regional class airports on a regular basis and for other airports as needed
4. Review and update the Prince William Sound/Copper River Area Transportation Plan periodically as appropriate
5. Identify data collection needs and develop transportation system performance monitoring systems
6. Encourage the use of vehicles with flexible passenger/freight interchangeability
7. Maintain or acquire right-of-way for potential future transportation uses
8. Implement appropriate instrumentation and technological advancements to enhance system flexibility
9. Provide mechanisms for the dissemination of current travel information so travelers can plan their trips more efficiently

GOAL 6: ASSURE THE PRESERVATION OF THE NEEDED TRANSPORTATION SYSTEM

Preserve and maintain existing transportation facilities and services which have been identified as necessary for both current and future conditions.

Objectives

1. Promote reliable revenue mechanisms that provide adequate funding for operation and maintenance of the existing and future transportation system
2. Implement institutional changes and provide training and skills development at the local government level to allow local operations and maintenance of selected transportation facilities
3. Encourage a balancing of the amount of fees or revenue generated by specific facilities/services to the amount expended for the preservation, operation, and maintenance of those same facilities/services
4. Utilize AMHS vessel data to identify those projects that will provide the maximum reduction to long term maintenance and operational cost
5. Identify existing facilities or services not needed in the future preferred options for disposition (i.e., transfer ownership, abandonment, limited use, etc.).

GOAL 7: DEVELOP AND PROTECT ECONOMIC AND SUBSISTENCE RESOURCES

Provide transportation facilities and services which support regional economic vitality while maintaining the region's unique subsistence, environmental and cultural resources.

Objectives

1. Increase access where desired and needed to facilitate economic development
2. Minimize environmental impacts of the transportation network
3. Maintain environmental integrity of Prince William Sound/Copper River area and the value of wilderness areas
4. Manage access to subsistence sites
5. Improve access to marine launching sites or dock facilities
6. Develop functional access plans that reflect local plans for economic development and local residents needs
7. Use transportation infrastructure to enhance desired regional economic development
8. Include affected business interests in decisions about transportation system needs and investments
9. Encourage participation by affected businesses in the provision of transportation facilities and services

GOAL 8: PROVIDE EARLY, MEANINGFUL AND CONTINUOUS PUBLIC INVOLVEMENT

Proactively and continuously involve Alaskans in the entire transportation planning, design, construction, and maintenance process to ensure that policies and projects reflect public knowledge, needs, and values.

Objectives

1. Follow the revised Public Involvement Procedure for the development of statewide plans and statewide capital improvement programs
2. Involve citizens and stakeholders groups, including affected business interests, in transportation decision-making
3. Coordinate the nomination and selection of transportation projects with local governments
4. Involve communities and stakeholders at all stages of schedule development for the AMHS
5. Give priority to projects where a preponderance of public record, including a resolution from the local elected body, shows support for the project

APPENDIX B: 2001–2003 NEEDS LIST

Location	Description	Estimate	Priority Score	GIP
AMHS				
AMHS Internet Reservation System	Purchase software, equipment, A4 and training support to implement an Internet-based reservation system.	650,000	1	NHS
AMHS Terminal Cathodic Protection Upgrade	Evaluate condition of AMHS terminal in-water structures, design and install cathodic protection upgrades.	525	1	
AMHS Terminal Improvements	Conduct survey of all AMHS terminals to evaluate traffic flow during loading and unloading and determine capital projects necessary to improve traffic flow.	500,000	3	NHS
Bartlett Service Life Extension	Refurbish accommodation spaces and machinery. Blast and paint decks, tanks, and voids. Install improved fire dampers, sprinkler systems, humidification, and PA systems. Upgrade electrical systems. Install computer network equipment. Install voyage data recorders. Improve wheelchair access. Remove asbestos containing materials. Replace existing, davits, and related equipment. Renovate the gallery.	4,400,000	2	
Cordova Lift Tower Rehabilitation	Replace siding, construct cover for cable and sheaves, and install OSHA compliant ladders to the counterweight life towers at the Cordova ferry terminal transfer facility.	75000	1	NHS
Fleetwide Stability Improvements	Improve general stability and ballast systems on vessels.	1,000,000	1	
M/V Bartlett Replacement	Construct a new vessel to service Prince William Sound.	34,021,000	3	NHS
M/V Bartlett SOLAS Compliance Fire Safety	Construct vessel modifications required by new SOLAS fire safety regulations.	705,000	3	NHS
M/V Tustumena Car Elevator Overhaul	Major overhaul of the car elevator and cargo handling equipment.	1,500,000	3	NHS
Tustumena Refurbishment	Refurbish accommodation spaces and machinery. Blast and paint decks, tanks and voids. Install improved fire dampers, sprinkler system, humidification system and PA systems. Upgrade electrical systems, install computer network equipment, install voyage data recorders. Improve wheelchair access.		1	NHS

Location	Description	Estimate	Priority Score	GIP
Chenega				
Airport	Extend electrical power to M&O building and install electricity and heat in building.	30,000		AV
Chitina				
Copper River Boat Launch	Develop a boat launch near Chitina for access to the Copper River.	100,000	3	TRAAK
Snow Removal Equipment Building	Construct new snow removal equipment building. Funded in March 1999, expected completion date 2000.	700,000		AV
Cordova				
(Merle Smith) Snow Removal Equipment Building	Construct new snow removal and equipment building	640,000		AV
Airport Rescue & Firefighting Equipment	Purchase new rescue and firefighting equipment.	250,000		AV
Breakwater Extension	Construct 150' extension to east breakwater to reduce maintenance, increase facility life and reduce damage to vessels. Crest elevation s/b 18' or higher.			PH
Cordova Lift Tower Rehabilitation	Replace siding, construct cover for cable and sheaves, install OSHA compliant ladders to the counterweight lift towers at the Cordova ferry terminal transfer facility.	75,000	1	NHS
Eyak Lake Airport Resurfacing	Resurface runway and taxiways with asphalt, fill and provide area for helicopter landings, construct float system for float planes.	2050000		AV
Eyak Lake Snow Removal Building	Construct snow removal equipment building.	512,000		AV
Inner Harbor Boat Launch Ramp Replacement	Replaces the existing 12'x128' concrete launch ramp located between the grid and Fish & Game dock.	150,000		PH
Interpretive Boardwalk	Construct boardwalk along the Cordova breakwater. Includes a kiosk and interpretative signs.	500,000	2	TRAAK
North Containment Dock Cathodic Protection System	Provides adequate cathodic protection for north containment dock.	50,000		PH
Old Tidal Grid Replacement	Replaces the 20'x184' tidal grid no.1 located adjacent to the Forest Service Dock. Any remaining funds will be used to complete repairs to grid no. 2 located adjacent to the boat launch ramp.	150,000		PH
Shepard Point Dock Oil Spill Response Project	Construct a deep water dock facility.	6,000,000		PH
Small Boat Harbor Expansion	Expansion of harbor.	100,000		PH

Location	Description	Estimate	Priority Score	GIP
Cordova, cont.				
Small Boat Harbor Repairs	Major repairs or replacement of oldest section of floats, replacing floatation, decking, bullrails, and stingers as required. Electrical and water system renovations.	500,000		PH
Snow Removal Equipment	Acquire SRE Deicing Equipment.	90,000		AV
Cordova-Copper River Highway				
Copper River Highway	Construct approximately 50 miles of road to connect Cordova to the contiguous highway system.		3	SHS
MP 5.5 – Bridge/Pedestrian Walkway	Attach pedestrian walkway to Eyak River Bridge, MP 5.5.	1,100,000	3	TRAAK
MP 10 to 18 Ped/Bike Path	Construct a Pedestrian/Bicycle facility along the Copper River Highway from 10 mile to 18 mile.	2,450,000	3	TRAAK
MP 18 – 37 Improvements	Reconstruction including widening, straightening, guardrail, snow poles, snow fence and asphalt paving.	7,250,000	3	SHS
MP 37 to 49 Paving	Pave existing crushed aggregate surface.	1,250,000	3	SHS
Million Dollar Bridge Rehabilitation #0206	Raise and reattach fallen section of bridge. Remainder of bridge will be partially rehabilitated.	3,000,000	3	SHS
Trestle Restoration	Restore wooden trestles at the Uranatina River, Eskilida Creek and O'Brien Creek along the Copper River and Northwestern Railroad Route.		3	TRAAK
Seward				
AMHS Intermodal Freight and Passenger Facilities	Construct capital improvements to intermodal freight and passenger facilities.	5,625,000	1	
Airport Master Plan	Update and revise the Airport Master Plan.			AV
Ferry Terminal	Restore the ferry terminal building to its original 1920-1930 motif. The work will include re-roofing, replacement of siding and windows, and other repairs as needed. The building will be brought up to uniform building code.		3	TRAAK
North Dock Extension and Breakwater Construction	Construct an extension of the North Dock at Seward Marine Industrial Complex. The extended dock will connect to a proposed breakwater to be construct by the Corps of Engineers project.	2,000,000		PH
Runway Lighting Replacement	Replace the existing lighting system for the Seward Airport runway.	373,333		AV

Location	Description	Estimate	Priority Score	GIP
Seward, cont.				
Seward Harbor Pedestrian Pathway	Construct a pedestrian/bicycle pathway between the Alaska Railroad Dock and Iditarod Trail connection of the intersection of 4th Avenue and Van Buren, a distance of 0.5 miles. Includes ADA accessible links, interpretive signs, information kiosks and street lighting.		1	TRAAK
Seward Small Boat Harbor Expansion	Expand harbor by removal of existing east breakwater and constructing a new breakwater next to the coal landing facility. Construct a new float system with power, water, overhead lighting, etc.	8,430,000		PH
Seward Terminal Improvements	Assist Alaska Railroad Cooperation in refurbishing the Seward dock. Resurface dock; replace dock fendering system; refurbish or replace terminal building; add a paved parking/staging area.	7,000,000	3	NHS
Seward Harbor	Identify and fund needed major maintenance, repairs, and replacements in the recently transferred state-to-Seward facilities in Seward Harbor.	31,342,000	NA	Bond Receipts
Seward - Seward Highway				
MP 25 to 30 Reconstruction – Falls Creek to Moose Pass	Rehabilitate roadway including widening, resurfacing, and replacement of the Falls Creek #0609 and Trail River #0610 Bridges.	8,900,000	1	NHS
MP 30 to 36 Reconstruction – Moose Pass to Sterling Wye	Rehabilitate roadway and or upgrade as needed. Project to include passing lanes.	3,000,000	1	NHS
Tatitlek				
Inner Harbor Construction	Construct inner harbor for 32 vessels after construction of a breakwater by the Corps of Engineers	1,350,000		PH
Valdez				
Airport Rehabilitation	Rehabilitate and repave the runways, taxiways, apron lighting system and security fencing.	5,500,000		AV
Airport Sand Storage Building	Construct sand storage building.			AV
Barge Landing Access	Improve access from the Richardson to Port Valdez to provide landing craft with barge landing facility (Alaska Avenue, Old Town).	275,000	2	CTP
City Dock Information and Interpretative Center	Provide an information and interpretative center for newly arriving ferry and cruise ship passengers. Extend 1,000' of boardwalk along South Harbor Drive. The boardwalk will extend over the water supported by a pile foundation.	300,000	2	TRAAK

Location	Description	Estimate	Priority Score	GIP
Valdez, cont.				
Harbor Boardwalk Extension	Extend 1,000' of boardwalk along South Harbor Drive. The boardwalk will extend over the water by a pile foundation.	235,000		PH
Harbor Boardwalk and Guardrail Improvements	Replace 500 feet of the existing timber boardwalk with a new concrete apron, hand-rails and 300 feet of new steel guardrail.	235,000		PH
Harbor Float Extension	Install an 8' x 100' concrete float and anchor pile; remove timber fenders.	830,000		PH
Harbor Illumination	Install four high mast lights (125+/-)	480,000		PH
Harbor Oil/Water Separators Installation	Install two storm drains that separate oil and water.	125,000		PH
Harbor Restroom Facility Construction	Construct new restroom facilities.	180,000		PH
Harbor Retaining Wall Extension	Construct a timber faced geotextile wall, modify approach dock and gangways and build a concrete apron with handrails.	1,295,000		PH
Valdez Floats A-G Electrical	Replacing and reconfiguring all main floats, headwalls and finger floats with modern concrete system including electrical and water between floats A and G. New electrical and fire protection for year round service is also included.	4,249,500		PH
Valdez Glacier Overlook	Improve road from the Rifle Range to Valdez Glacier and construct a scenic overlook at the end of the road.	300,000	3	TRAAK
Valdez Harbor Expansion	Project feasibility study with the Army Corps of Engineers to expand the harbor at Valdez			
Richardson Highway MP: 65 to 79 Rehabilitation	Re-level and resurface.	3,500,000	3	NHS
Whittier				
Airport Improvements	Brush cutting and general repair.	1,300,000		AV
Cove Creek Road Rehabilitation	Rehabilitate.		3	CTP
Depot Road Rehabilitation	Rehabilitate.		3	CTP
Depot/Dock Road Reconstruction	Reconstruct Depot/Dock Road from the intersection with Whittier Street to the DeLong Dock.		3	CTP
Glacier Drive Rehabilitation	Upgrade and pave.		3	CTP
Harbor Expansion	Construct boat harbor expansion of Whittier Harbor.	12,000,000		PH
Pedestrian Overpass	Construct pedestrian overpass over railroad facility.		3	CTP

Location	Description	Estimate	Priority Score	GIP
Pedestrian/Emergency Overcrossing to Small Boat Harbor	Pedestrian overpass from city center to the harbor and marine facilities to provide for safe crossing of the railroad tracks.		3	TRAAK
Railroad Dock Program	Rehabilitate dock and building.		3	NHS
Shotgun Cove Road Construction	Construct a road from Whittier to the proposed harbor site near the head of Shotgun Cove.	20,000,000	3	CTP
Whittier Ferry Access Portage Valley Road	Rehabilitate and widen from the Anton Anderson Tunnel. Portal to the ferry dock. Includes landscaping and safety rest area.	2,500,000	3	NHS
Whittier Maintenance & Operations	Federal-Aid eligible portion of Whittier tunnel and approaches maintenance and operation performed by contractor prior to turnover to DOT&PF.		1	NHS

APPENDIX C: 1998–2000 STIP PROJECTS

Name	Project Description	Funding Source	Phase	Apprn	FFY 99	FFY 00
Chitina						
Chitina	Edgerton Highway – Bike/Pedestrian Facility		2			
	Construct one mile of bike path from One Mile Lake to Chitina.		3			
			4			
		Federal		STP		\$91.0
		State				\$9.0
		Other				
		Project Total			\$0.0	\$100.0
Edgerton Highway	Kenny Lake Multi-Use Trail		2			
	Construct pedestrian/bicycle facility along the Edgerton Highway from the Richardson Highway to 8 mile.		3			
			4			
		Federal		TE	\$769.6	\$318.4
		State			\$76.4	\$31.6
		Other				
		Project Total			\$846.0	\$350.0
Cordova						
Cordova	Copper River Highway MP 6.5 to 17 Paving		2			
	Repave and widen the Copper River Highway form MP 6.5 to MP 17.		4			
		Federal		STP		
		State				
		Other				
		Project Total			\$0.0	\$0.0
Cordova	Lake Avenue Upgrade		2			
	Replace curb, gutter, sidewalks, utilidor, storm drainage system, new guardrail, culverts, and reshape ditches.		3			
			4			
		Federal		STP	\$2,092.3	
		State			\$207.7	
		Other				
		Project Total			\$2,300.0	\$0.0

Name	Project Description Funding Source	Phase	Apprn	FFY 99	FFY 00
Cordova	Shepard Point Road	2			
	Construct about 4 miles of road from Orca Cannery to deep water port site at Shepard Point.	4			
	Federal State Other Project Total		STP	\$0.0	\$0.0
Cordova	Copper River Highway MP 5.5 – Bridge/Ped Walkway	2			
	Attach pedestrian walkway to Eyak River bridge, MP 5.5 Copper River Highway	4			
	Federal State Other Project Total		STP	\$91.0 \$9.0 \$100.0	\$909.7 \$90.3 \$1,000.0
Cordova	Bering River Railroad Park	2			
	Create railroad park by rehabilitating railroad engine, installing at old railroad site, and site will be landscaped.	4			
	Federal State Other Project Total		TE		\$68.2 \$6.8 \$75.0
Cordova	Copper River Highway MP 0.0 to 5.5 Pedestrian/Bike Path	2			
	Construct a pedestrian/bicycle facility along the Copper River Highway from downtown Cordova to the Eyak River.	3			
		4			
	Federal State Other Project Total		STP		\$318.4 \$31.6 \$350.0
Copper River Highway	Million Dollar Bridge #0206	2			
	Seismic reinforcement, anchoring piers, and install isolation bearings and joints.	4			
	Federal State Other Project Total		DBP/BR	\$0.0 \$0.0 \$0.0	\$1,600.0 \$5,500.0 \$7,100.0

Name	Project Description Funding Source	Phase	Apprn	FFY 99	FFY 00
Copper River Trail	Allen River Segment	2			
	Improve recreational access road from the Million Dollar Bridge and construct trailhead facilities for the Copper River Trail.	3			
		4			
	Federal		STP		\$682.3
	State				\$67.7
	Other				
	Project Total				\$750.0
Copper River Trail	Chitina to Uranatina Segment	2			
	Improve the recreational access road from Chitina to the Uranatina River, including trailhead facilities for the Copper River Trail.	3			
		4			
	Federal		STP	\$545.8	\$409.4
	State			\$54.2	\$40.6
	Other				
	Project Total			\$600.0	\$450.0
Copper River Trail	Copper River Trail: Uranatina River to Tiekkel River	2			
	Construct a trail between Uranatina River to Tiekkel River.	4			
	Federal		STP		\$363.9
	State				\$36.1
	Other				
	Project Total			\$0.0	\$400.0
Seward					
Seward	Pathway Construction PH I	2			
	Construct pedestrian paths along Van Buren Avenue from 4th Avenue to 2nd Avenue along Railway Avenue from 6th.	3			
		4			
	Federal		TE		\$91.0
	State				\$9.0
	Other				
	Project Total			\$0.0	\$100.0
Seward	Seward Railcar Preservation				
	Preservation of 1916 Alaska Railcar.	4			
	Federal		TE	\$45.5	\$91.0
	State			\$4.5	\$9.0
	Other				
	Project Total			\$50.0	\$100.0

Name	Project Description Funding Source	Phase	Apprn	FFY 99	FFY 00
Seward Highway	MP 0.0 to 8- Seward to Grouse Creek Canyon	2			
	Rehabilitate roadway and or upgrade including bridge work as needed.	3			
	Federal		NHS	\$1,137.1	
	State			\$112.9	
	Other				
	Project Total			\$1,250.0	
Seward Highway	MP 8 to 13 – Grouse Creek Canyon	3			
	Rehabilitate the roadway to include widening for passing lanes, grade changes, and reconstruction of the Grouse Creek Bridge.	4			
	Federal			\$136.5	\$9,415.4
	State			\$13.5	\$934.6
	Other				
	Project Total			\$150.0	\$10,350.0
Seward Highway	MP 13 to 18 – Grouse Creek Canyon	3			
	Rehabilitate roadway, widen and construct a grade-separated railroad crossing just south of Snow River.	4			
	Federal		NHS	\$6,313.3	
	State			\$626.7	
	Other				
	Project Total			\$6,940.0	
Seward Highway	MP 18 to 25 – Snow River to Falls Creek	2			
	Widen to include a grade separated railroad crossing at Crown Point, bridge rehabilitation, passing lanes and resurfacing of the roadway.	3			
		4			
	Federal		NHS	\$1,091.6	
	State			\$108.4	
	Other				
	Project Total			\$1,200.0	\$0.0
Valdez					
Valdez	Airport Road Bike Trail				
	Construct bike trail from Richardson Highway to the Valdez Airport Terminal Building.	2			
		4			
	Federal		TE		\$67.7
	State				\$2.3
	Other				\$5.0
	Project Total			\$0.0	\$75.0

Name	Project Description Funding Source	Phase	Apprn	FFY 99	FFY 00
Valdez	Dayville Road Bike Path				
	Construct a bike path along Dayville Road from Richardson Highway to Alaska Pipeline Terminal.	2			
		4			
	Federal		TE		\$270.0
	State				
	Other				\$30.0
	Project Total			\$0.0	\$300.0
Valdez	Valdez Gold Rush Trail				
	Improve historic Gold Rush Trail through Keystone Canyon and Thompson Pass near Valdez.	2			
		4			
	Federal		TE	\$207.4	
	State			\$20.6	
	Other				
	Project Total			\$228.0	\$0.0
Valdez	Valdez Marine Improvements (new construction)				
	Construct new ferry mooring structures in line with city dock, allowing joint use of dock.	2			
		4			
	Federal		TRANS/STP	\$454.9	
	State			\$45.2	
	Other				
	Project Total			\$500.1	\$0.0
Valdez	Valdez Terminal Replacement				
	Construct new terminal building.	2			
		4			
	Federal		TRANS	\$160.0	\$1,040.0
	State			\$40.0	\$260.0
	Other				
	Project Total			\$200.0	\$1,300.0
Valdez	Valdez Uplands Improvement (new construction)				
	Construct improved vehicle staging area.	4			
	Federal		TRANS	\$3,360.0	\$1,040.0
	State			\$840.0	\$0.0
	Other				
	Project Total			\$4,200.0	\$1,040.0

Name	Project Description Funding Source	Phase	Apprn	FFY 99	FFY 00
Valdez	Dayville Road Improvements	2			
	Rehabilitate and widen.	4			
	Federal		STP	\$682.3	
	State			\$67.7	
	Other				
	Project Total			\$750.0	\$0.0
Whittier					
Whittier	Whittier Terminal Improvements	2			
	Construct new terminal building and pave staging area.	4			
	Federal		TRANS/STP	\$227.4	\$1,200.0
	State			\$22.6	\$300.0
	Other				
	Project Total			\$250.0	\$1,500.0
Whittier	Whittier Intermodal Facility and Pedestrian Overpass	2			
	Seismic reinforcement, anchoring piers, and install isolation bearings and joints.	4			
	Federal		FTA	\$700.0	
	State				
	Other			\$175.0	
	Project Total			\$875.0	\$0.0
Whittier	Whittier Access Improvements	2			
Whittier Maintenance & Operations	Construct a combination one and two-way road, including the shared use of one tunnel by automobiles and trains.	4			
	Federal		STP/T	\$8,800.0	\$12,000.0
	State			\$2,200.0	\$3,000.0
	Other		ATIB	\$9,000.0	
	Project Total			\$20,000.0	\$15,000.0
Richardson Highway	MP 4 to 8 Erosion Repair	2			
	Provide riprap protection of the road embankment.	3			
		4			
	Federal		NHS	\$4,503.0	
	State			\$447.0	
	Other				
	Project Total			\$4,950.0	

Name	Project Description Funding Source	Phase	Apprn	FFY 99	FFY 00
Richardson Highway	MP 6 to 14 Rehabilitation – Robe River to Low River	2			
	Re-level and resurface from Robe River to Lowe River	4			
	Federal		NHS	\$2,110.5	
	State			\$209.5	
	Other				
	Project Total			\$2,320.0	
Richardson Highway	MP 14 to 26 Keystone Canyon to Thompson Pass	2			
	Resurfacing and drainage improvements.	4			
	Federal		NHS	\$5,749.3	
	State			\$570.7	
	Other				
	Project Total			\$6,320.0	